

## ARG44234 anti-DAPK1 antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes DAPK1
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	DAPK1
Species	Human
Immunogen	Recombinant protein of Human DAPK1
Conjugation	Un-conjugated
Alternate Names	DAPK1; Death Associated Protein Kinase 1; DAPK; Death-Associated Protein Kinase 1; DAP Kinase 1; EC 2.7.11.1; EC 2.7.11; ROCO3

### Application Instructions

Application table	Application	Dilution
	IHC-P	2-5 µg/ml
	WB	0.25-0.5 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

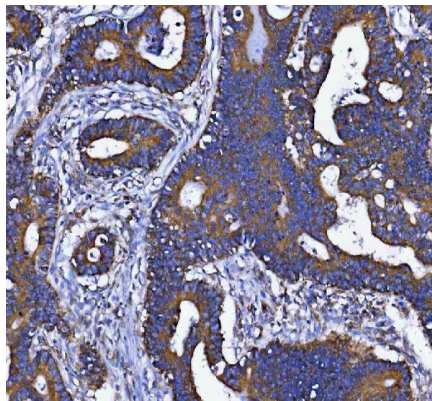
### Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	DAPK1
Gene Full Name	Death Associated Protein Kinase 1
Background	Death-associated protein kinase 1 is a positive mediator of gamma-interferon induced programmed cell death. DAPK1 encodes a structurally unique 160-kD calmodulin dependent serine-threonine kinase that carries 8 ankyrin repeats and 2 putative P-loop consensus sites. It is a tumor suppressor candidate. Alternative splicing results in multiple transcript variants.
Function	Calcium/calmodulin-dependent serine/threonine kinase involved in multiple cellular signaling pathways that trigger cell survival, apoptosis, and autophagy. Regulates both type I apoptotic and type II autophagic cell deaths signal, depending on the cellular setting. The former is caspase-dependent, while the latter is caspase-independent and is characterized by the accumulation of autophagic vesicles. Phosphorylates PIN1 resulting in inhibition of its catalytic activity, nuclear localization, and cellular function. Phosphorylates TPM1, enhancing stress fiber formation in endothelial cells. Phosphorylates STX1A and significantly decreases its binding to STXBP1. Phosphorylates PRKD1 and regulates JNK signaling by binding and activating PRKD1 under oxidative stress. Phosphorylates BECN1, reducing its interaction with BCL2 and BCL2L1 and promoting the induction of autophagy. Phosphorylates TSC2, disrupting the TSC1-TSC2 complex and stimulating mTORC1 activity in a growth factor-dependent pathway. Phosphorylates RPS6, MYL9 and DAPK3. Acts as a signaling amplifier of NMDA receptors at extrasynaptic sites for mediating brain damage in stroke. Cerebral ischemia recruits DAPK1 into the NMDA receptor complex and it phosphorylates GRINB at Ser-1303 inducing injurious Ca2+ influx through NMDA receptor channels, resulting in an irreversible neuronal death. Required together with DAPK3 for phosphorylation of RPL13A upon interferon-gamma activation which is causing RPL13A involvement in transcript-selective translation inhibition.
Calculated Mw	160 kDa
PTM	Phosphoprotein, Ubl conjugation
Cellular Localization	Cytoplasm, Cytoskeleton

Images

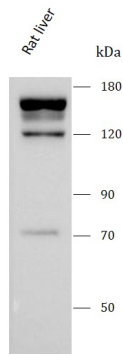


ARG44234 anti-DAPK1 antibody IHC-P image

Immunohistochemistry: Human colorectal adenocarcinoma stained with ARG44234 anti-DAPK1 antibody at 2 µg/ml dilution.

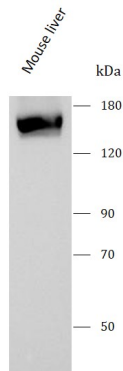
#### ARG44234 anti-DAPK1 antibody WB image

Western blot: Rat liver stained with ARG44234 anti-DAPK1 antibody at 0.5  $\mu\text{g}/\text{mL}$  dilution.



#### ARG44234 anti-DAPK1 antibody WB image

Western blot: Mouse liver stained with ARG44234 anti-DAPK1 antibody at 0.5  $\mu\text{g}/\text{mL}$  dilution.



#### ARG44234 anti-DAPK1 antibody IHC-P image

Immunohistochemistry: Human lung cancer stained with ARG44234 anti-DAPK1 antibody at 2  $\mu\text{g}/\text{mL}$  dilution.

